CONSERVATION COMMISSION

STORMWATER MANAGEMENT ORDINANCE

AND

STORMWATER MANAGEMENT RULES & REGULATIONS



CITY OF ATTLEBORO, MASSACHUSETTS

BRISTOL COUNTY

STORMWATER MANAGEMENT ORDINANCE OF THE ATTLEBORO CONSERVATION COMMISSION \$19 of the Revised Ordinances Of The City Of Attleboro, as amended

ADOPTED April 15, 2008

Effective July 14, 2008

STORMWATER MANAGEMENT RULES & REGULATIONS OF THE ATTLEBORO CONSERVATION COMMISSION

For Applying The
Attleboro STORMWATER MANAGEMENT ORDINANCE
\$19 of the Revised Ordinances of the City of Attleboro, as amended

ADOPTED June 18, 2008

Effective July 14, 2008

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— STORMWATER MANAGEMENT ORDINANCE —

§19–1.1, PURPOSE:

- A. The purpose of this ordinance is to protect, maintain, and enhance the public health, safety, environment, and general welfare by establishing minimum requirements and procedures to control the adverse effects of construction site stormwater runoff, post—construction stormwater runoff, and illicit connections and discharges to the municipal storm drain system. This ordinance seeks to meet these purposes through the following objectives:
 - 1. Establish decision-making processes regarding construction site activities that protect the integrity of the watershed and preserve the health of water resources;
 - Prevent pollutants from entering the City's municipal storm drain system; prohibit illicit connections and unauthorized discharges to the municipal storm drain system; and require the removal of all such illicit connections;
 - 3. Establish minimum construction and post—construction stormwater management standards and design criteria for the regulation and control of stormwater runoff quantity and quality;
 - 4. Establish design and application criteria for the construction and use of structural stormwater control facilities that can be used to meet the minimum post—development stormwater management standards;
 - 5. Encourage the use of nonstructural stormwater management, stormwater "better site design" practices or LID practices, such as reducing impervious cover and the preservation of open space and other natural areas, to the maximum extent practicable;
 - 6. Establish provisions for the long-term responsibility for, and maintenance of, structural stormwater control facilities and nonstructural stormwater management practices to ensure that they continue to function as designed, are maintained, and pose no threat to public safety;
 - 7. Establish administrative procedures for the submission, review, and approval or disapproval of stormwater management plans, and for the inspection of approved active projects and long-term follow up; establish certain administrative procedures and fees for the submission, review, approval, or disapproval of stormwater plans, and the inspection of approved projects;
 - 8. Comply with State and Federal statutes and regulations relating to stormwater discharges; and
 - 9. Establish the City of Attleboro's legal authority to ensure compliance with the provisions of this ordinance through permitting, inspection, monitoring, and enforcement.
- **B.** Nothing in this ordinance is intended to replace the requirements of the City of Attleboro <u>WETLANDS PROTECTION ORDINANCE</u> or any other ordinance that may be adopted by the City of Attleboro, or any state or federal requirement, law, regulation, or policy. Any activity subject to the provisions of this ordinance must comply with all other applicable city, state, or federal requirements.

§19–1.2, DEFINITIONS:

The following definitions shall apply in the interpretation and implementation of this ordinance. Additional definitions may be adopted by separate regulation:

AGRICULTURE: The normal maintenance or improvement of land in agricultural or aquacultural use, as defined by the Massachusetts Wetlands Protection Act and its implementing regulations.

ALTER: Any activity, which will measurably change the ability of a ground surface area to absorb water or will change existing surface drainage patterns. The term "alter" shall include "alteration of drainage characteristics" and "conducting land disturbance activities."

APPLICANT: A property owner or duly designated agent who has filed an application for a Stormwater Management Permit (SMP) with the Office of the City Clerk.

BEST MANAGEMENT PRACTICE (BMP): Structural, non-structural, and managerial techniques that are recognized to be the most effective and practical means to prevent and/or reduce increases in stormwater volumes and flows, reduce point source and nonpoint source pollution, and promote stormwater quality and protection of the environment. "Structural" BMPs are devices that are engineered and constructed to provide temporary storage and treatment of stormwater runoff. "Nonstructural" and "Managerial" BMPs use natural measures and better site design techniques to reduce pollution levels, do not require extensive construction efforts, and/or promote pollutant reduction by eliminating the pollutant source.

BETTER SITE DESIGN: Site design approaches and techniques that can reduce a site's negative effects impact on water quality and the natural environment through the use of nonstructural stormwater management practices. Better site design includes conserving and protecting natural areas and greenspace, reducing impervious cover, disconnecting impervious cover, and using natural features for stormwater management.

CLEAN WATER ACT: The Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.) as hereafter amended.

DISCHARGE OF POLLUTANTS: The addition from any source of any pollutant or combination of pollutants into the municipal storm drain system or into the Waters of the United States or Commonwealth of Massachusetts from any source.

EROSION: The wearing away of the land surface by natural or artificial forces such as wind, water, ice, gravity, or vehicle traffic, and the subsequent detachment and transportation of soil particles.

GROUNDWATER: Water beneath the surface of the ground.

ILLICIT CONNECTION: Any drain or conveyance, whether on the surface or subsurface, which allows an illicit discharge to enter the municipal storm drain system including but not limited to any conveyance which allows any nonstorm water discharge including sewage, process wastewater, and wash water to enter the municipal storm drain system and any connections to the municipal storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency.

ILLICIT DISCHARGE: Any direct or indirect non-storm water discharge to the storm drain system, except as exempted in the regulations.

IMPERVIOUS COVER: Any material or structure on or above the ground that prevents water from infiltrating through the underlying soil. Impervious cover is defined to include, without limitation, paved parking lots, sidewalks, roof tops, driveways, patios, and paved, gravel, and compacted dirt surfaced roads.

INFILTRATION: The act of conveying surface water into the ground to permit groundwater recharge and the reduction of stormwater runoff from a project site.

LAND-DISTURBING ACTIVITY: Any activity that causes a change in the position or location of soil, sand, rock, gravel, or similar earth material or that removes vegetative cover from the land.

LOW IMPACT DEVELOPMENT (LID): LID incorporates non-structural and natural approaches to new and redevelopment projects to reduce adverse effects on water quality and the natural environment by conserving natural areas, reducing impervious cover, and better integrating stormwater treatment.

MUNICIPAL STORM DRAIN SYSTEM: The system of conveyances designed or used for collecting or conveying stormwater, including any road with a drainage system, street, gutter, curb, inlet, piped storm drain, pumping facility, retention or detention basin, natural or man—made or altered drainage channel, reservoir, and other drainage structure that together comprise the storm drainage system owned or operated by the City of Attleboro.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER DISCHARGE PERMIT: A permit issued by the U.S. Environmental Protection Agency or issued jointly with the Commonwealth of Massachusetts that authorizes the discharge of pollutants to Waters of the United States.

NEW DEVELOPMENT: Any construction or land disturbance on a lot, or on a portion of a lot, that is currently in a vegetated state.

NONPOINT SOURCE POLLUTION: Pollution from many diffuse sources caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and man-made pollutants, finally depositing them into water resource areas.

NON–STORMWATER DISCHARGE: Discharge to the City of Attleboro municipal storm drain system not composed entirely of stormwater.

OWNER: A person with a legal or equitable interest in property, including a contract purchaser with a valid purchase and sales agreement.

PERSON: Includes any individual, group of individuals, association, partnership, limited liability company, corporation, company, business organization, trust, estate, the Commonwealth or political subdivision thereof to the extent subject to city ordinances, administrative agency, public or quasi–public corporation or body, the City of Attleboro, and any other legal entity, its legal representatives, agents, or assigns.

POLLUTANT: Any element or property of sewage, agricultural, industrial or commercial waste, leachate, heated effluent, or other matter whether originating at a point or nonpoint source, that is or may be introduced into the City of Attleboro municipal storm drain system or Waters of the United States or Waters of the Commonwealth of Massachusetts.

POLLUTION: The presence in the environment of pollutants in quantities or characteristics which are or may be harmful to human, plant or animal life, or property, or which unreasonably interferes with the comfortable enjoyment of life and property.

RECHARGE: The process by which groundwater is replenished by precipitation through the percolation of runoff through the soil.

REDEVELOPMENT: Any construction, alteration, or improvement on existing land that contains impervious cover and provided that the activity does not involve an increase in the net amount of impervious cover.

RUNOFF: Rainfall, snowmelt, or irrigation water flowing over the ground surface.

SEDIMENT: Mineral or organic soil material that is transported by wind or water from its origin to another location; the product of erosion processes.

SEDIMENTATION: A process of depositing material that has been suspended and transported in water.

SITE: Any lot or parcel of land or area of property where land-disturbing activities are, were, or will be performed.

SOIL: Any aggregated particles of earth, sand, rock, gravel, or similar material.

STORMWATER: Storm water runoff, snow melt runoff, and surface water runoff and drainage.

STORMWATER AUTHORITY: The City of Attleboro Conservation Commission. The Conservation Commission is responsible for coordinating the review, approval and permit process as defined in this ordinance.

STORMWATER MANAGEMENT PERMIT (SMP): A permit issued by the Conservation Commission after review of an application, plans, calculations, and other supporting documents, which is designed to protect the environment of the City from the deleterious effects of uncontrolled and untreated stormwater runoff.

WATERS OF THE COMMONWEALTH: All waters within the jurisdiction of the Commonwealth of Massachusetts, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, vernal pools, coastal waters, and groundwater.

WASTEWATER: Any sanitary waste, sludge, septage, or septic tank or cesspool contents or discharge, and process wastewater.

§19–1.3, AUTHORITY:

This ordinance is adopted under authority granted by the Home Rule Amendment of the Massachusetts Constitution, the Home Rule statutes, and pursuant to the regulations of the Federal Clean Water Act found at 40 CFR 122.34.

§19–1.4, STORMWATER MANAGEMENT PERMIT REQUIRED:

- A. All new development and redevelopment and any activity that will result in an increased amount of stormwater runoff or pollutants flowing from a parcel of land, alter the drainage characteristics of a parcel of land, or create flows that enter the municipally owned storm drain system, and as more specifically defined as part of Regulations promulgated as a result of this ordinance, shall be required to obtain a SMP unless exempt pursuant to §19–1.5, EXEMPTIONS of this ordinance.
- **B.** Each SMP application shall be reviewed by the Conservation Commission for compliance with the purpose and requirements of this ordinance and the criteria set forth in the rules and regulations.

§19–1.5, EXEMPTIONS:

No person shall alter land within the City of Attleboro without having obtained a SMP for the property, with the following exemptions:

- 1. Construction, renovation, or modification of a single–family dwelling and associated accessory structures customary to single–family lots;
- 2. Construction, renovation, or modification of a two-family dwelling on a single lot and associated accessory structures customary to such lots;
- 3. Any new development that will disturb an area containing the lesser of 2,500 square feet or twenty–five (25%) percent of the property area. This exemption shall not be applied for contiguous properties held in common ownership at the time of adoption of this ordinance and may not be applied to permit phased construction projects or expansions that are not shown on the original SMP application;
- 4. Any redevelopment that will disturb an area less than 2,500 square feet of a property;
- 5. Normal maintenance and improvement of land in agricultural use as defined by the <u>WETLANDS PROTECTION ACT</u> regulation 310 CMR 10.04 and MGL Chapter 40A §3 <u>THE ZONING ACT</u>;
- 6. Any projects for which all necessary applications have been filed with the Planning Board, the Zoning Board of Appeals, and the Conservation Commission within ninety (90) days of the effective date of this ordinance;
- 7. Emergency repairs to existing roads or their drainage systems, or to any stormwater management facility or practice that poses a threat to public health or safety, or as deemed necessary by the Conservation Commission;
- 8. Emergency repairs to existing utilities; and
- 9. Applications for definitive subdivision plans under MGL CH. 41, §81O of the <u>Subdivision Control Law</u>, in which the Planning Board retains exclusive jurisdiction over stormwater management subject to §6.3, <u>STORMWATER MANAGEMENT SYSTEMS PERFORMANCE STANDARDS</u> of the Planning Board's <u>Rules and Regulations</u> Governing the <u>Subdivision of Land</u>, as amended.

§19–1.6, ADMINISTRATION:

- **A.** The Conservation Commission shall administer, implement, and enforce this ordinance. Any powers granted to, or duties imposed upon, the Conservation Commission may be delegated in writing by the Conservation Commission to its employees or duly appointed agents.
- **B.** The Conservation Commission may adopt, and periodically amend, rules and regulations relating to the terms, conditions, definitions, enforcement, fees (including application, inspection, and/or consultant fees), procedures, and administration of this <u>STORMWATER MANAGEMENT ORDINANCE</u> by majority vote of the full Conservation Commission after conducting a public hearing to receive comments on any proposed revisions. Such hearing dates shall be advertised in a newspaper of general local circulation, at least ten (10) business days prior to the hearing date. After public notice and public hearing, the Conservation Commission may promulgate rules and regulations to effectuate the purposes of this ordinance. Failure by the Conservation Commission to promulgate such rules and regulations or a legal declaration of their invalidity by a court shall not act to suspend or invalidate the effect of this ordinance.
- C. The purpose of the rules and regulations is to further define and clarify the terms and procedures set forth in the ordinance. In the event of any conflict between the ordinance and such rules and regulations, the ordinance shall prevail. The Commission may waive any provision of its rules and regulations when it is not deemed appropriate.
- **D.** The Conservation Commission may take any of the following actions as a result of an application for a SMP as more specifically defined as part of stormwater regulations promulgated as a result of this ordinance: Approval with Conditions, or Denial.
- E. A decision of the Conservation Commission may be appealed to the Superior Court in accordance with MGL CH. 249, §4.

§19–1.7, ENFORCEMENT:

- **A.** The Attleboro Conservation Commission or its Agent shall enforce this ordinance, any rules and regulations, orders, violation notices, and enforcement orders issued pursuant thereto, and may pursue all civil and criminal remedies for such violations. Enforcement shall be further defined and included as part of any stormwater regulations promulgated as permitted under §19–1.6, ADMINISTRATION of this ordinance.
- **B.** The Conservation Commission may seek remedies under the ordinance, including instituting a civil action to obtain an injunction, criminal enforcement of up to THREE HUNDRED (\$300.00) DOLLARS per violation per day, and/or non-criminal citations of up to THREE HUNDRED (\$300.00) DOLLARS per violation per day.

§19-1.8, SEVERABILITY:

The invalidity of any section, provision, paragraph, sentence, or clause of this ordinance shall not invalidate any other section, provision, paragraph, sentence, or clause thereof, nor shall it invalidate any permit or determination that previously has been issued.

— STORMWATER MANAGEMENT RULES & REGULATIONS —

SECTION 1: GENERAL PROVISIONS

§1.1, PURPOSE:

The purpose of these stormwater rules and regulations is to protect, maintain, and enhance the public health, safety, environment, and general welfare by establishing minimum requirements and procedures to control the adverse effects of land disturbance activities, increased post—development stormwater runoff, decreased groundwater recharge, nonpoint source pollution associated with new development and redevelopment, and illicit connections and discharges, as more specifically addressed in the City of Attleboro STORMWATER MANAGEMENT ORDINANCE.

§1.2, DEFINITIONS:

The definitions contained herein apply to issuance of a Stormwater Management Permit (SMP) established by the City of Attleboro <u>STORMWATER MANAGEMENT ORDINANCE</u> and implemented through these <u>STORMWATER MANAGEMENT RULES AND REGULATIONS</u>. Terms not defined in this section shall be construed according to their customary and usual meaning, unless the context indicates a special or technical meaning.

ALTER: Any activity, which will measurably change the ability of a ground surface area to absorb water or will change existing surface drainage patterns. Alter may be similarly represented as "alteration of drainage characteristics," and "conducting land disturbance activities."

APPLICANT: A property owner or duly designated agent who has filed an application for a Stormwater Management Permit with the Conservation Commission.

BEST MANAGEMENT PRACTICE (BMP): Structural, non-structural, and managerial techniques that are recognized to be the most effective and practical means to prevent and/or reduce increases in stormwater volumes and flows, reduce point source and nonpoint source pollution, and promote stormwater quality and protection of the environment. "Structural" BMPs are devices that are engineered and constructed to provide temporary storage and treatment of stormwater runoff. "Nonstructural" and "Managerial" BMPs use natural measures and better site design techniques to reduce pollution levels, do not require extensive construction efforts, and/or promote pollutant reduction by eliminating the pollutant source.

BETTER SITE DESIGN: Site design approaches and techniques that can reduce a site's negative impact on water quality and the natural environment through the use of nonstructural stormwater management practices. Better site design includes conserving and protecting natural areas and greenspace, reducing impervious cover, disconnecting impervious cover, and using natural features for stormwater management.

CERTIFICATE OF COMPLETION: A document issued by the Conservation Commission after all construction activities have been completed which states that all conditions of an issued SMP have been met and that a project has been completed in compliance with the conditions set forth in the SMP.

CERTIFICATE OF MAILING: Proof of abutter notification used when applicant uses Priority Mail to notify abutters of a Stormwater Management Permit filing. The Post Office provides a date–stamped receipt ("certificate") for each letter mailed, which must then be submitted to the Conservation Commission as proof of abutter notification.

CONCEPT PLAN: An optional application that may be submitted by an applicant during the Stormwater Management Permit process. The Concept Plan enables the applicant to determine the feasibility of the site design concept before detailed engineering design is performed. An approval or denial by the Commission of a Concept Plan does not preclude the applicant from proceeding with a Final Plan.

CONVEYANCE: Any structure or device, including pipes, drains, culverts, curb breaks, paved swales or man–made swales of all types, designed or utilized to move or direct stormwater runoff or existing water flow.

CRITICAL AREAS: Areas that may be designated by the Conservation Commission as having sensitive resources that may be negatively impacted by stormwater discharges. Such areas may include, but are not limited to, §319 Impaired Waterways, vernal pools, and City of Attleboro Water Resource Protection Districts.

DEVELOPER: A person who undertakes or proposes to undertake land disturbance activities.

DEVELOPMENT: The modification of land to accommodate a new use or expansion of use, usually involving construction.

DISTURBANCE OF LAND: Any action that causes a change in the position, location, or arrangement of soil, sand, rock, gravel, or similar earth material.

DRAINAGE EASEMENT: A legal right granted by a landowner to a grantee allowing the use of private land for the conveyance or treatment of stormwater, and/or access to inspect or maintain one or more stormwater management facilities and/or drainage structures.

EFFECTIVE IMPERVIOUS AREA: Impervious area that is directly connected to a stream or drainage system and that results in measurable runoff from most precipitation events. Effective Impervious Area does not include impervious surfaces that drain directly to pervious areas.

EROSION AND SEDIMENT CONTROL (ESC): The prevention or reduction of the movement of soil particles or rock fragments.

EROSION AND SEDIMENT CONTROL PLAN: A plan that shows the location and construction detail(s) of the erosion and sediment reduction controls to be utilized for a construction site.

FINAL PLAN: An application for a Stormwater Management Permit that may or may not follow the submittal of a Concept Plan. The Final Plan shall depict all relevant stormwater information and shall contain the specified elements outline in §2(F), STORMWATER MANAGEMENT PLAN CONTENTS of this regulation.

FLOOD CONTROL: The prevention or reduction of flooding and flood damage.

FLOODING: A local and temporary inundation or a rise in the surface of a body of water, such that it covers land not usually under water.

GRADING: Changing the level or shape of the ground surface.

GROUNDWATER: Water beneath the surface of the ground.

HOTSPOT: Land uses or activities with higher potential pollutant loadings, including, but not limited to, auto salvage yards, auto fueling facilities, fleet storage yards, commercial parking lots with high intensity use, road salt storage areas, commercial nurseries and landscaping, outdoor storage and loading areas of hazardous substances, or marinas.

ILLICIT CONNECTION: Any drain or conveyance, whether on the surface or subsurface, which allows an illicit discharge to enter the municipal storm drain system, including, but not limited to, any conveyance which allows any non–stormwater discharge including sewage, process wastewater, and wash water to enter the municipal storm drain system, and any connections to the municipal storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency.

ILLICIT DISCHARGE: Any direct or indirect non-stormwater discharge to the storm drain system, except as exempted in §3.3, CRITERIA FOR CONNECTIONS TO THE STORM DRAIN SYSTEM of these STORMWATER MANAGEMENT RULES AND REGULATIONS.

IMPERVIOUS COVER: Any material or structure on or above the ground that prevents water from infiltrating through the underlying soil. Impervious cover is defined to include, without limitation, paved parking lots, sidewalks, rooftops, driveways, patios, and paved, gravel, and compacted dirt surfaced roads.

INFILTRATION: The act of conveying surface water into the ground to permit groundwater recharge and the reduction of stormwater runoff from a project site.

LOW IMPACT DEVELOPMENT (LID): The incorporation of non-structural and natural approaches to new and redevelopment projects to reduce adverse effects on water quality and the natural environment by conserving natural areas, reducing impervious cover, and better integrating stormwater treatment.

MASSACHUSETTS STORMWATER MANAGEMENT STANDARDS (MASWMS): The Standards issued by the Department of Environmental Protection (DEP), and as amended, that coordinate the requirements prescribed by State regulations promulgated under the authority of the Massachusetts WETLANDS PROTECTION ACT, MGL ch 131 §40, Massachusetts WETLAND PROTECTION REGULATIONS 310 CMR 10.00, and the Massachusetts CLEAN WATERS ACT, MGL ch 21, §23–§56. The standards address stormwater impacts through implementation of performance standards to reduce or prevent pollutants from reaching water bodies and control the quantity of runoff from a site.

MUNICIPAL STORM DRAIN SYSTEM: The system of conveyances designed or used for collecting or conveying stormwater, including any road with a drainage system, street, gutter, curb, inlet, piped storm drain, pumping facility, retention or detention basin, natural or man—made or altered drainage channel, reservoir, and other drainage structure that together comprise the storm drainage system owned or operated by the City of Attleboro.

NATURAL OPEN SPACE: A portion of a development site that is permanently set aside for public or private use which will not be developed, wherein the topography and vegetation remains unaltered by clearing and grading during construction and protected in perpetuity.

NEW DEVELOPMENT: Any construction or land disturbance on a lot, or on a portion of a lot, that is currently in a vegetated state.

NONPOINT SOURCE POLLUTION: Pollution from many diffuse sources caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and man—made pollutants, finally depositing them into water resource areas.

NON-STORMWATER DISCHARGE: Discharge to the City of Attleboro municipal storm drain system not composed entirely of stormwater.

OPERATION AND MAINTENANCE PLAN: A plan that defines the functional, financial, and organizational mechanisms for the ongoing operation and maintenance of a stormwater management system to ensure that it continues to function as designed and permitted.

ORDINANCE: The City of Attleboro <u>STORMWATER MANAGEMENT ORDINANCE</u> (Chapter 19 of the <u>REVISED ORDINANCES OF THE CITY OF ATTLEBORO</u>), and any revisions thereto.

OWNER: A person with a legal or equitable interest in property, including a contract purchaser with a valid purchase and sales agreement.

PERSON/PARTY: Includes any individual, group of individuals, association, partnership, corporation, company, business organization, trust, estate, the Commonwealth or political subdivision thereof to the extent subject to City ordinances, administrative agency, public or quasi–public corporation or body, the City of Attleboro, and any other legal entity, its legal representatives, agents, or assigns.

PRE-DEVELOPMENT: The conditions that exist at the time that plans for the land development of a tract of land are submitted to the Conservation Commission. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time prior to the first plan submission shall establish pre-development conditions.

POINT SOURCE: Any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, or container from which pollutants are or may be discharged.

POST–DEVELOPMENT: The conditions that reasonably may be expected or anticipated to exist after completion of the land development activity on a specific site or tract of land. Post–development refers to the phase of a new development or redevelopment project after completion, and does not refer to the construction phase of a project.

RECHARGE: The process by which groundwater is replenished by precipitation through the percolation of runoff through the soil.

RECORD DRAWING: Drawings that completely record and document applicable aspects and features of the conditions of a project following construction using Stormwater Management Plans derived from a Stormwater Management Permit.

REDEVELOPMENT: Any construction, alteration, or improvement on existing land that contains impervious cover and provided that the activity does not involve an increase in the net amount of impervious cover.

RESOURCE AREA: Any area protected under, including without limitation, the <u>MASSACHUSETTS WETLANDS</u> <u>PROTECTION ACT</u>, the <u>MASSACHUSETTS RIVERS ACT</u>, or the City of Attleboro <u>LOCAL WETLANDS PROTECTION</u> <u>ORDINANCE</u>.

RUNOFF: Rainfall, snowmelt, or irrigation water flowing over the ground surface.

SEDIMENTATION: A process of depositing material that has been suspended and transported in water.

SITE: Any lot or parcel of land or area of property where land-disturbing activities are, were, or will be performed.

STOP WORK ORDER: An order issued by the Conservation Commission that requires that all construction activity on a site be stopped until further notice.

STORMWATER AUTHORITY: The City of Attleboro Conservation Commission. The Conservation Commission is responsible for coordinating the review, approval, and permit process as defined in this <u>STORMWATER MANAGEMENT ORDINANCE</u>.

STORMWATER MANAGEMENT: The use of structural and/or non-structural practices that are designed to reduce stormwater runoff pollutant loads, discharge volumes, and/or peak flow discharge rates.

STORMWATER MANAGEMENT PERMIT (SMP): A permit issued by the Conservation Commission, after review of an application, plans, calculations, and other supporting documents, which is designed to protect the environment of the City from the deleterious effects of uncontrolled and untreated stormwater runoff.

TP: Total Phosphorus.

TSS: Total Suspended Solids.

WATER QUALITY VOLUME (WQv): The storage needed to capture a specified average annual stormwater runoff volume for treatment. Numerically, WQv will vary as a function of the drainage area or area of impervious surface.

§1.3, AUTHORITY:

- **A.** The stormwater rules and regulations contained herein have been adopted in accordance with the City of Attleboro's STORMWATER MANAGEMENT ORDINANCE.
- **B.** Nothing in these stormwater rules and regulations is intended to replace or be in derogation of the requirements of the City of Attleboro's <u>LOCAL WETLANDS PROTECTION ORDINANCE</u> or any stormwater rules and regulations adopted thereunder.
- **C.** These stormwater rules and regulations may be periodically amended by the Conservation Commission in accordance with the procedures outlined in §19–1.6, ADMINISTRATION of the STORMWATER MANAGEMENT ORDINANCE.

§1.4, REVISIONS:

These stormwater rules and regulations may be revised from time to time by a majority vote of the full membership of the Conservation Commission, provided that after public notice, a public hearing has been held in accordance with §19–1.6, <u>ADMINISTRATION</u> of the <u>STORMWATER MANAGEMENT ORDINANCE</u>. Prior to any vote, the Conservation Commission shall provide a draft copy of the proposed revisions to the Planning Board and the Zoning Board of Appeals. The Planning Board and the Zoning Board of Appeals shall have forty—five (45) days from the date of receipt to provide written comment.

§1.5, ADMINISTRATION:

The Conservation Commission shall administer, implement and enforce these <u>STORMWATER MANAGEMENT RULES AND REGULATIONS</u>.

§1.6, APPLICABILITY:

These stormwater rules and regulations apply to all activities in accordance with the applicable sections of the <u>STORMWATER MANAGEMENT ORDINANCE</u> and further described in this section. Projects and/or activities within the jurisdiction of the <u>STORMWATER MANAGEMENT ORDINANCE</u> must obtain a SMP from the Conservation Commission in accordance with the permit procedures and requirements defined in <u>\$2 APPLICABLE PROCEDURES</u> of these stormwater rules and regulations.

A. New Development:

- 1. Except as expressly provided herein, stormwater runoff from all industrial, commercial, institutional, office, residential, roadway, and transportation projects including site preparation, construction, and additions/expansions, and all point source and non-point source stormwater discharges from said projects shall be managed according to these stormwater rules and regulations.
- 2. Linear projects that are not more than 10 feet in width, including footpaths, bikepaths, and other paths for pedestrian and/or non-motorized vehicle access, shall meet these stormwater rules and regulations to the maximum extent practicable.
- B. Redevelopment Except as expressly provided herein, stormwater from all redevelopment projects as defined in §1.2, <u>DEFINITIONS</u> of these stormwater rules and regulations shall be managed according to these stormwater rules and regulations with the following exceptions, which shall meet these stormwater rules and regulations to the maximum extent practicable:
 - Maintenance and improvement of existing roadways, including widening less than a single lane, adding shoulders, correcting substandard intersections, improving existing drainage systems, and repaving; and
 - 2. Remedial projects specifically designed to provide improved stormwater management such as projects to separate storm drains and sanitary sewers and stormwater retrofit projects.
- C. Exemptions The uses and activities listed in §19–1.5, EXEMPTIONS of the STORMWATER MANAGEMENT ORDINANCE shall be exempt from the STORMWATER MANAGEMENT RULES AND REGULATIONS.

SECTION 2: APPLICATION PROCEDURES

- **A.** Projects requiring a SMP shall be required to submit the materials as specified in this section, and are required to meet the stormwater management performance criteria as specified in §3 PERFORMANCE STANDARDS.
- **B.** Permit Required:
 - 1. Any land owner or land operator who is not exempt according to §19–1.5, EXEMPTIONS of the STORMWATER MANAGEMENT ORDINANCE shall not receive any building, grading, or other land development permits required for land disturbance activities without first obtaining a SMP.
 - 2. A permit shall expire three (3) years from the date of issuance. The applicant has the right to request up to a one (1) year extension of time for the SMP, provided that the request is submitted in writing thirty (30) days prior to the expiration date. When an extension of time is requested, the Conservation Commission reserves the right to evaluate the existing SMP to determine whether the plan still satisfies the regulatory requirements and to verify that all design factors are still valid.
- C. Filing Application The applicant shall file with the Conservation Commission an original and ten (10) copies of a completed application package for a SMP. While the applicant can be a representative, the permittee must be the property owner. The applicant must certify that the application is complete. If a submitted application does not include all of the required information as listed in the plan checklists, the application will be deemed incomplete and will not be processed. The SMP application package may be submitted in two stages an optional Concept Plan and the mandatory Final Plan. The Concept Plan is an optional application that enables the applicant to determine the feasibility of the site design concept before detailed engineering design is performed. Denial by the Commission of a Concept Plan shall not preclude the applicant from proceeding with a Final Plan, nor shall approval of a concept plan obligate the Commission to approve a Final Plan. An applicant may choose to skip the Concept Plan step at his/her own discretion and proceed directly with a Final Plan application. The following are the application filing requirements:
 - **a.** For the Concept Plan:
 - i. A completed current SMP Application Form (available from the Commission office or the City of Attleboro web site) with original signatures of all owners;
 - ii. Stormwater Management Concept Plan and supporting information in accordance with the current "Checklist for Concept Stormwater Management Plan" as provided in Appendix A; and
 - iii. Payment of the Application and Consultant Services Fees pursuant to §2(E), FEES.
 - **b.** For the Final Plan:
 - i. A completed current *SMP Application Form* (available from the Commission office or the City of Attleboro web site) with original signatures of all owners;
 - The Conservation Commission's Certified List of Abutters form (available from the Conservation ii. Commission office or the City of Attleboro web site). The list shall include the names and addresses of all abutters and shall be signed by an authorized representative of the City Tax Assessor's Office. Written notification of the filing of a SMP shall be delivered by the applicant via Certified Mail, Priority Mail with Certificate of Mailing, or hand delivery to all abutters of the property subject to the application. Abutters include any property located directly opposite on any public or private street or way, and any abutters to the abutters within one hundred (100') feet of the property line of the applicant, including any abutters located in another community or across a body of water. When a SMP application is filed concurrently with a Conservation Commission application, the abutter notification shall be combined and shall utilize the more restrictive abutter notification radius. The abutters shall be notified of both applications with one notification. The notice shall be made using the Conservation Commission's Notification to Abutters form (available from the Commission office or the City of Attleboro web site) and shall provide the time, place, and subject matter of the public hearing. Written notice shall be given to abutters not less then five (5) business days prior to the public hearing. Evidence of proper abutter notification shall be provided to the Conservation Commission prior to its opening of the public hearing;

- iii. Stormwater Management Final Plan and supporting information in accordance with the current "Checklist for Final Stormwater Management Plan" as provided in Appendix B;
- iv. Operation and Maintenance Plan;
- v. Payment of the application and review fees per §2(E), FEES of these STORMWATER MANAGEMENT RULES AND REGULATIONS;
- vi. Inspection and Maintenance Agreement; and
- vii. Erosion and Sediment Control Plan.
- **D.** Entry Filing an application for a SMP grants the Conservation Commission, or its designated agent, permission to enter the site to verify the information in the application prior to issuance of a SMP.
- E. Fees The Conservation Commission shall obtain with each submission an Application Fee established by the Conservation Commission to cover expenses connected with the review of the SMP.

1. Rules:

- a. Application fees are payable at the time of application and are non-refundable.
- **b.** The Conservation Commission shall calculate application fees by in accordance with the fee schedule below.
- c. These application fees are in addition to any other local or state fees that may be charged under any other law, or local ordinance.
- **d.** The fee schedule may be revised from time to time.

2. Application Fees:

- a. Concept Plan: A non-refundable application fee of \$100.00 shall be due and payable to the City of Attleboro at the time an application is filed.
- **b.** Final Plan: A non–refundable application fee of \$400.00 shall be due and payable to the City of Attleboro at the time an application is filed.
- c. Revised Plan: A non-refundable fee of \$300.00 shall be due and payable to the City of Attleboro at the time any plan revisions beyond second submission (i.e., one (1) plan revision shall be included in the initial application fee).

3. Consultant Services Fees:

- a. As provided by MGL CH. 44 §53G, and §19–1.6, ADMINISTRATION of the City of Attleboro STORMWATER MANAGEMENT ORDINANCE, the Commission may charge reasonable fees for consulting services engaged by the Commission in the review of SMP applications and for inspections of stormwater management systems during construction and post–construction.
- b. Funds received by the Conservation Commission pursuant to these stormwater rules and regulations shall be deposited with the City Treasurer who shall establish a special account for this purpose. Expenditures from this special account may be made at the direction of the Commission without further appropriation as provided in §19–1.6, ADMINISTRATION of the STORMWATER MANAGEMENT ORDINANCE and MGL CH. 44 §53G.

- c. Expenditures from this account shall be made only in connection with the review and inspections of a specific project or projects for which a Consultant Services Fee has been collected from an applicant. Specific consultant services may include, but are not limited to, resource area, hydrogeologic and drainage analysis, analysis of impacts on regulated resource areas, general compliance with the stormwater management requirements of these stormwater rules and regulations, and construction and post-construction inspection services.
- d. The consultant shall be chosen by, and report only to, the Commission and/or its agent. The Commission shall give written notice to the applicant of the selection of an outside consultant, which notice shall state the identity of the consultant, the amount of the fee to be charged to the applicant, and a request for payment of said fee in its entirety. Such notice shall be deemed to have been given on the date it is mailed or delivered. No such costs or expenses shall be incurred by the applicant if the application or request is withdrawn within five (5) days of the date notice is given. The Consultant Services Fee must be received in its entirety prior to the initiation of consulting services.
- e. The Commission may request additional Consultant Services Fees if the necessary review or inspection requires a larger expenditure than originally anticipated, or if new information requires additional consultant services. Failure by the applicant to pay the Consultant Services Fee specified by the Commission within ten (10) business days of the request for payment shall be cause for the Commission to determine that the application is administratively incomplete.
- f. Subject to applicable law, the Conservation Commission shall return any unused portion of any fees collected to the applicant within forty–five (45) calendar days of a written request by the applicant, unless the Conservation Commission decides in a public meeting that other action is necessary.

F. Stormwater Management Plan Contents:

- 1. Stormwater Management Plans shall contain sufficient information for the Conservation Commission to evaluate the environmental impact, effectiveness, and acceptability of the measures proposed by the applicant for reducing adverse impacts from stormwater runoff. These plans shall be in accordance with the criteria established in these stormwater rules and regulations and must be submitted with the stamps and signatures of a professional engineer and a professional land surveyor, both of whom must be licensed in the Commonwealth of Massachusetts.
- 2. The Stormwater Management Concept Plan shall include each item specified in the current "Checklist for Concept Stormwater Management Plan" as provided in Appendix A of these stormwater rules and regulations. All items must be submitted at the time of filing to be considered a complete application.
- 3. The Stormwater Management Final Plan shall include each item specified in the current "Checklist for Final Stormwater Management Plan" as provided in Appendix B of these stormwater rules and regulations. All items must be submitted at the time of filing to be considered a complete application.
- **G.** Erosion and Sediment Control Plan The Erosion and Sediment Control (ESC) Plan shall be designed to ensure compliance with the SMP and these stormwater rules and regulations and to ensure that the Massachusetts Surface Water Quality Standards, (314 CMR 4.00) are met during construction. The ESC Plan shall show the location of and describe the Construction BMPs to be used on the site and the required maintenance, as well as other relevant information, including (as applicable):
 - 1. Locations of the proposed limits of land disturbance on the site, with provisions that the limits must be marked with tape, signs, or orange construction fence by the developer at the site prior to commencing any land disturbance activities, and shall be inspected by the owner or authorized designated agent;
 - Location and technical description of appropriate erosion and sediment control measures proposed to be installed
 and inspected by the Conservation Commission or its designee prior to soil disturbance in accordance with the
 approved plans;

- 3. Location and technical description of the perimeter sediment control system that shall be installed and maintained around active construction areas such as, but not limited to, borrow or stockpile areas, roadway improvements, and areas within fifty (50') feet of a building under construction, to be inspected by the Conservation Commission or its designee prior to initial disturbance;
- 4. Location and means of diversion of offsite runoff from highly erodible soils and steep slopes to more stable areas;
- 5. A Sequence of Construction for all land disturbance activities exceeding one (1) acre in size (including lot development) that requires stormwater controls to be installed and the soil stabilized, as disturbance beyond the one (1) acre continues. Mass clearing and grading for sites greater than five (5) acres in size shall not be permitted without prior written approval from the Conservation Commission or its Agent;
- 6. Location of soil stockpiles and provision to stabilize exposed soils within five (5) business days of completion of construction of a given area. Stockpile side slopes shall not be greater than 2:1;
- 7. Location and description of vehicle tracking pad(s) to be constructed at all entrance/exit points of the site to reduce the amount of soil carried onto roadways and off the site;
- 8. Location and description of proposed dust controls to be employed on the site, minimizing soil disturbance through applying mulch and establishing vegetation, water spraying, surface roughening, and/or applying polymers, spray—on tackifiers, chlorides, and barriers;
- 9. A program for monitoring and maintenance of erosion and sediment control measures throughout the course of construction shall be required as part of the Operation and Maintenance Plan described in §2(H), OPERATION AND MAINTENANCE PLAN CONTENTS of these stormwater rules and regulations;
- 10. Provisions to ensure that temporary sediment trapping devices are not removed until permanent stabilization is established in all contributory drainage areas, as well as provisions to ensure that stabilization is established prior to converting sediment traps/basins into permanent (post–construction) stormwater management facilities;
- 11. Provisions to ensure that all facilities used as temporary measurers shall be cleaned prior to being put into final operation and are inspected by the Conservation Commission or its designee, and indicating that areas to be used as post—construction infiltration practices should be protected during construction to prevent compaction;
- 12. A program for vegetative stabilization of exposed soil through the establishment of permanently growing vegetation;
- 13. The Plan must demonstrate that the area of disturbance shall be kept to a minimum and that disturbed areas remaining idle for more than fourteen (14) days shall be stabilized with hydroseeding or other appropriate stabilization measure(s);
- 14. The Plan must specify that permanent seeding be undertaken in the spring (from March through June) or in the late summer and early fall (from August 1st to October 15th). During the peak summer months and in the fall after October 15th, when seeding is found to be impractical, an appropriate temporary mulch or sod shall be applied. Permanent seeding may be undertaken during the summer if plans provide for adequate mulching and irrigation;
- 15. The Plan must specify that all slopes steeper than 3:1, as well as perimeter dikes, sediment basins or traps, and embankments must, upon completion, be immediately stabilized with sod, seed, anchored straw mulch, or other approved stabilization measures; areas outside of the perimeter sediment control system must not be disturbed; and
- 16. The Plan must specify that the cut side of roads and ditches shall be stabilized immediately with rock rip-rap or other non-erodible erosion control liners, or where appropriate, vegetative measures such as sod.

- H. Operation and Maintenance Plan Contents An Operation and Maintenance Plan (O&M Plan) is required at the time of application for the Final Plan Approval. The O&M Plan shall be designed to ensure compliance with the SMP and these stormwater rules and regulations and to ensure that the Massachusetts Surface Water Quality Standards are met in all seasons and throughout the life of the system. The O&M Plan shall remain on file with the Conservation Commission. The contents of the O&M Plan shall be an ongoing requirement. The O&M Plan shall include:
 - 1. The name(s) of the owner(s) for all components of the system;
 - 2. A map showing the location of the systems and facilities including, but not limited to, catch basins, manholes/access lids, drain pipes, and stormwater devices;
 - **3.** Maintenance agreements that specify:
 - a. The names and addresses of the person(s) responsible for operation and maintenance;
 - **b.** The person(s) responsible for financing maintenance and emergency repairs;
 - c. An Inspection and Maintenance Schedule for all temporary erosion and sediment control practices and permanent stormwater management facilities, including routine and non–routine maintenance tasks to be performed;
 - d. A list of easements with the purpose and location of each; and
 - **e.** The signature(s) of the owner(s).
 - 4. Drainage Easement(s):
 - **a.** Drainage easements shall be provided by the property owner(s) as necessary for:
 - i. Access for facility inspections and maintenance;
 - ii. Preservation of stormwater runoff conveyance, infiltration, and treatment areas and facilities, including flood routes for the 100–year storm event; and
 - iii. Direct maintenance access by heavy equipment to structures requiring regular maintenance.
 - **b.** The purpose of each easement shall be specified in the maintenance agreement signed by the property owner.
 - **c.** Drainage easements are required for all areas used for off–site stormwater control, unless the Conservation Commission grants a waiver .
 - **d.** The Conservation Commission shall record drainage easements with the Bristol County Registry of Deeds prior to issuance of a Certificate of Completion.
 - 5. Changes to Operation and Maintenance Plans:
 - **a.** The owner(s) of the stormwater management system must notify the Conservation Commission in writing of changes in ownership or assignment of financial responsibility.
 - b. The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of these stormwater rules and regulations by mutual agreement of the Conservation Commission and the Responsible Parties. Amendments must be in writing and signed by all Responsible Parties. Responsible Parties shall include owner(s), persons with financial responsibility, and persons with operational responsibility.

I. Public Hearings – The Conservation Commission shall hold a public hearing for projects or activities that require the issuance of a SMP. Once a complete application is filed, the Commission shall schedule a hearing within ninety (90) days of the Conservation Agent's certification that the application and supporting materials have been submitted. Supplemental information for complete applications shall be submitted within five (5) business days of the public hearing to be considered. Failure to submit supplemental information within this time frame may be grounds for the Commission to continue a public hearing. The Commission has the discretion to adjust the SMP hearing schedule based on workload. Where applicable, SMP applications will be heard concurrently with Notice of Intent (NOI) applications for projects under the jurisdiction of the MASSACHUSETTS WETLANDS PROTECTION ACT and/or the LOCAL WETLANDS PROTECTION ORDINANCE.

J. Actions:

- 1. The Conservation Commission's action on a Concept Plan application, rendered in writing, shall consist of either:
 - a. Approval of the SMP Concept Plan application based upon determination that the proposed concept adequately meets the requirements set forth in these stormwater rules and regulations. A Concept Plan Approval Letter shall not obligate the Conservation Commission to approve the Final Plan application;
 - **b.** Denial of the SMP Concept Plan application based upon a determination that the proposed concept does not adequately meet the requirements set forth in these stormwater rules and regulations.
- 2. The Conservation Commission's action on a Final Plan application for the issuance of a SMP, rendered in writing, shall consist of either:
 - a. Approval of the SMP application based upon determination that the proposed plan meets the standards in §3 PERFORMANCE STANDARDS and will adequately protect the water resources of the community and is in compliance with the requirements set forth in these stormwater rules and regulations, subject to any conditions, modifications, or restrictions required by the Conservation Commission. Any SMP issued pursuant to the STORMWATER MANAGEMENT ORDINANCE shall run with the land and be binding upon the original owner and any successors and assigns.
 - b. Denial of the SMP application based upon a determination that the proposed plan does not meet the Standards in §3 PERFORMANCE STANDARDS or does not adequately protect water resources, as set forth in these stormwater rules and regulations.
- **K.** Failure of the Conservation Commission to take final action upon an application within 21 calendar days of closing the public hearing shall be deemed to be an approval of said application. Upon certification by the City Clerk that the allowed time has lapsed without Conservation Commission action, the Conservation Commission must issue a SMP.
- L. Plan Modifications The applicant must notify the Conservation Commission in writing of any drainage change or alteration in the system authorized in a SMP before any change or alteration is made. If the Conservation Commission determines that the proposed change or alteration is significant, the Conservation Commission may require that an application to amend the SMP be filed. No work associated with the proposed modification shall be performed until the Conservation Commission approves, by majority vote, the modifications at a public meeting and notifies the applicant in writing as such.
- M. Appeals of Actions of the Conservation Commission A decision of the Conservation Commission shall be final. Further relief of a decision by the Conservation Commission made under these stormwater rules and regulations shall be reviewable in the Superior Court in an action filed within sixty (60) days thereof, in accordance with MGL CH. 249 §4. An appeal of an action by a City of Attleboro board, commission or department that has current regulatory authority for a project and/or activity shall be conducted under the applicable appeal provisions of said board, commission and/or department of the City of Attleboro.

N. Project Completion – The Conservation Commission has the authority to require, at the completion of the project, the submission of Record Drawing(s) of all structural stormwater controls and treatment best management practices required for the site as required in §3 PERFORMANCE STANDARDS The Record Drawing(s) shall show any deviations from the approved plans, if any, and be stamped and certified for substantial compliance by a Massachusetts–licensed professional engineer and a Massachusetts–licensed professional land surveyor.

SECTION 3: PERFORMANCE STANDARDS

§3.1, CONSTRUCTION STORMWATER MANAGEMENT CRITERIA:

- A. At a minimum, the Erosion and Sediment Control Plan shall comply with the performance standards of the most recent version of the Massachusetts Erosion and Sedimentation Control Guidelines for Urban and Suburban Areas: A Guide for Planners, Designers, and Municipal Officials published by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA), as well as the following:
- **B.** General Criteria The following general performance criteria shall be applicable to all Erosion and Sediment Control (ESC) Plans, unless otherwise provided for in these stormwater rules and regulations:
 - 1. Measures shall be taken to control erosion within the project area.
 - 2. The removal of existing trees and ground cover is to be kept at a minimum.
 - 3. Wetland areas and surface waters shall be protected from sedimentation.
 - 4. Sediment in runoff water shall be trapped and retained within the project area. All temporary sediment trapping devices shall be designed to retain 1 inch of runoff from the contributing drainage area.
 - 5. All construction site measures shall be designed to accommodate (safely convey without creating erosive conditions) the 10-year, 24-hour return frequency storm event.

§3.2, POST-CONSTRUCTION STORMWATER MANAGEMENT CRITERIA:

- **A.** At a minimum, all projects shall comply with the performance standards of the most recent version of Massachusetts Stormwater Management Standards (MASWMS), as well as the following:
- **B**. General Criteria The following general performance criteria shall be applicable to all Stormwater Management Plans, unless otherwise provided for in these stormwater rules and regulations:
 - 1. No Untreated Discharges All stormwater runoff generated from land development and land use conversion activities shall not discharge untreated stormwater runoff directly to a wetland, local water body, municipal drainage system, or abutting property, without adequate treatment.
 - 2. Site Design Criteria The use of Low Impact Development (LID) measures is required to the maximum extent practicable for new development in order to promote recharge, reduce runoff volumes, and minimize reliance on structural stormwater management measures. The Site Design Criteria require that the site planning process shall be documented and shall include the following steps:
 - a. Identify and map the critical environmental resources at the site as listed in the Concept Plan Checklist (Appendix A);

- **b.** Delineate potential building envelopes avoiding environmental resource areas and providing a buffer from regulated resources of at least twenty–five (25') feet;
- c. Document percent of natural open space provided on-site;
- **d.** Develop methods to minimize impervious surfaces, and document percent of impervious surfaces proposed on–site;
- e. Develop methods to disconnect impervious surfaces and document percent of effective impervious cover proposed on–site; and
- f. Document how each of the applicable Site Design Features listed in the Concept Plan Checklist (Appendix A) were considered and incorporated into the site design, as practicable.

3. Recharge Volume (R_e)

- a. Annual groundwater recharge rates shall be maintained by promoting infiltration through the use of structural and non–structural methods. At a minimum, annual recharge from the post development site shall approximate the annual recharge from pre–development site conditions.
- b. The R_e should be determined using the methods prescribed in the latest version of the MASWMS. The recharge requirements shall apply to all activities within the jurisdiction of these stormwater rules and regulations except as noted, and unless specifically waived by the Conservation Commission. The recharge criterion is not required for any portion of a site designated as a stormwater hotspot. In addition, the Conservation Commission may relax or eliminate the recharge requirement at its discretion, if the site is situated on unsuitable soils or is in a redevelopment area with documentation of prior contaminated soils.

4. Water Quality Volume (WQ_v)

a. The prescribed water quality volume required in the sizing of a structural stormwater practice shall be:

1.0 inch x the total impervious area of the drainage area

- b. Structural Practices for Water Quality All structural stormwater management facilities shall be selected and designed using the appropriate criteria from the most recent version of the MASWMS. For other structural stormwater controls not included in the MASWMS, or for which pollutant removal rates have not been provided, the effectiveness and pollutant removal of the structural control must be documented through prior studies, literature reviews, or other means and receive approval from the Conservation Commission before being included in the design of a stormwater management system. Structural best management practices (BMPs) must be designed to remove eighty (80%) percent of the average annual post development total suspended solids (TSS) in accordance with the methods and procedures outlined in the latest edition of the MASWMS. In addition, projects proposed within the Orr's Pond and Bungay River Water Resource Protection Districts must be designed to remove both eighty (80%) percent TSS and forty (40%) percent TP. The allowable BMPs and associated TSS and TP removal rates are provided in Appendix C. Practices may be implemented in series to meet required pollutant removals (see the latest edition of the MASWMS for guidance on calculating total pollutant removal from practices in a series). It is presumed that a BMP provides the removal rate listed in Appendix C and complies with this performance goal if it is:
- i. Sized to capture the prescribed water quality volume;
- ii. Designed according to the specific performance criteria outlined in the MASWMS;
- iii. Constructed properly; and
- iv. Maintained regularly;

5. Channel Protection (Cp_v)

- a. Protection of channels from bank and bed erosion and degradation shall be provided by attenuating the 24—hour extended detention storage of runoff of the post–development 1–year, 24—hour return frequency storm event.
- Exemptions to Channel Protection Requirement Since there are practical limitations on minimum orifice or weir sizes needed to control Cp_v, as well as flow and receiving water considerations, the requirement shall be waived for:
 - i. Small sites (i.e., sites requiring less than 1-inch orifice);
 - ii. Sites with post-development discharges less than 2 cfs;
 - iii. Direct discharges to 4th order or greater streams, lakes, and reservoirs, where the development area is less than five (5%) percent of the watershed area upstream of the development site; and
 - iv. Indirect discharges to an existing drainage network with adequate capacity to accommodate the flows from the site where the ultimate discharge is to a 4th order or greater stream, lake, or reservoir.
- 6. Flooding Protection (Q_p) Downstream flood, property, and public safety protection shall be provided by attenuating the post–development peak discharge rates for the 10–year and 100–year 24–hour return frequency storm events to the pre–development rates.

7. Conveyance Criteria:

- a. The proposed stormwater conveyance system shall, at minimum, accommodate the runoff from a 25-year storm event. The discharge from any stormwater facility must be conveyed through properly constructed water courses to provide for non-erosive flows during all storm events. Rip-rap (or other approved energy dissipaters) shall be placed at all flared-end sections, pipe outlets, overflow weirs, drainage swales, and any other location at the discretion of the Conservation Commission. Rip-rap shall be sized such that the stones will be able to resist movement due to discharge velocity.
- b. If a closed drainage system is proposed, a catchbasin-to-manhole system is required rather than a catchbasin-to-catchbasin system. Manholes shall be provided at changes in direction and wherever there is a change in pipe size. Catchbasins shall be located on both sides of the roadway on continuous grades at intervals of not more than three hundred (300') feet, at low points, and at the corners of intersecting streets. Intervals of less than three hundred (300') feet may be required on steep grades. The Commission may ask for an inlet capacity analysis on a case-by-case basis.
- c. All drain lines to be connected to the municipal drain line shall be constructed by way of a drain manhole being installed between the existing drain line and the proposed drain line(s).
- 8. Redevelopment Projects Redevelopment projects shall, at a minimum, comply with one of the following:
 - a. Reduce the total impervious cover by forty (40%) percent from existing conditions;
 - **b.** Where site conditions prevent a reduction in impervious cover, implement stormwater controls for at least forty (40%) percent of the site's impervious cover; or
 - c. Implement a combination of impervious cover reduction and area treated with stormwater controls that shall equal or exceed forty (40%) percent of the site's impervious cover.

- 9. Hydrologic Basis for Design of Structural Practices For facility sizing criteria, the basis for hydrologic and hydraulic evaluation of development sites are as follows:
 - a. Impervious cover is measured from the site plan and includes any material or structure on or above the ground that prevents water from infiltrating through the underlying soil. Impervious surface is defined to include, without limitation: paved parking lots, sidewalks, roof tops, driveways, patios, and paved, gravel, and compacted dirt surfaced roads. Alternative surfaces (e.g., porous pavement, grass pavers, etc.) are encouraged for low–traffic sidewalks and parking lots, and these areas may be removed from the total impervious area calculations when designing the stormwater system for recharge and water quality criteria only. General design guidance is included in the MASWMS, but there is not one set of required design criteria since alternative paving technology is still evolving and improving. Thus, the applicant shall submit specifications for any proposed alternative surfaces, which shall be reviewed by the Conservation Commission on a case—by—case basis.
 - b. Off-site areas draining to the site shall be included in the hydrologic and hydraulic analyses.
 - c. The models TR-55 and TR-20 (or approved equivalent) shall be used for sizing stormwater practices.
 - **d.** The length of sheet flow used in the TR–55 method for time of concentration calculations is limited to no more than 100 feet for pre–development conditions and fifty (50') feet for post–development conditions.
 - e. For purposes of computing runoff, all pervious lands in the site prior to development shall be assumed to be in good condition regardless of conditions existing at the time of computation.
 - **f.** Detention time for the Cp_v is defined as the center of mass of the inflow hydrograph and the center of mass of the outflow hydrograph.
 - g. The Rational Method will be used for drainage conveyance calculations needed to size components of the selected drainage conveyance system.
 - h. The specified design storms shall be defined as 24-hour, Type III distribution design storm events using the rainfall amounts specified for Bristol County in the Hydrology Handbook for Conservation Commissioners.
 - i. Proposed residential, commercial, or industrial developments shall apply these stormwater management criteria to the land development as a whole. Individual lots in new developments shall not be considered separate land development projects, but rather the entire development shall be considered a single land development project. Hydrologic parameters shall reflect the ultimate land development and shall be used in all engineering calculations.
- 10. Critical Areas Stormwater discharges to critical areas with sensitive resources may be subject to additional criteria, or may need to utilize or restrict certain stormwater management practices at the discretion of the Conservation Commission. The Conservation Commission may designate critical areas on a case—by—case basis based on information brought during the hearing and will do this within fourteen (14) days of opening a public hearing.
- 11. Hotspots Stormwater discharges from land uses or activities with higher potential pollutant loadings, known as "hotspots," as defined in the most recent version of the MASWMS and herein these stormwater rules and regulations, require the use of specific stormwater management BMPs as specified in the most recent version of the MASWMS. The use of infiltration practices without adequate pretreatment is prohibited.

§3.3, CRITERIA FOR CONNECTIONS TO THE STORM DRAIN SYSTEM:

A. Connections to the municipal storm drain system of the City of Attleboro shall be governed by the following provisions.

B. Prohibited Activities:

- 1. Illicit Discharges No person shall dump, discharge, cause, or allow to be discharged any pollutant or non-stormwater discharge into the municipal storm drain system.
- 2. Illicit Connections No person shall construct, use, allow, maintain, or continue any illicit connection to the municipal storm drain system, regardless of whether the connection was permissible under applicable law, regulation or custom at the time of connection.
- 3. Obstruction of Municipal Storm Drain System No person shall obstruct or interfere with the normal flow of stormwater into or out of the municipal storm drain system without prior written approval from the Conservation Commission.
- C. Exemptions Any discharges associated with municipal fire fighting activities are exempt from the discharge prohibitions established by this section. In addition, other non-stormwater discharges or flows (such as, but not limited to, water line flushing and discharge from foundation drains) are exempted from the discharge prohibitions of this section, provided that the source is not a significant contributor of a pollutant to the municipal storm drain system as determined by the Conservation Commission.
- D. Suspension Due to Illicit Discharges in Emergency Situations The Conservation Commission may suspend municipal storm drain system access to any person or property without prior written notice when such suspension is necessary to stop an actual or threatened discharge of pollutants that presents imminent risk of harm to the public health, safety, welfare, or the environment. In the event any person fails to comply with an emergency suspension order, the Conservation Commission, its employees and agents may take all reasonable steps to prevent or minimize harm to the public health, safety, welfare, or the environment.
- E. Suspension Due to the Detection of Illicit Discharge(s) Any person discharging to the municipal storm drain system in violation of these stormwater rules and regulations may have their municipal storm drain system access terminated if such termination would abate or reduce an illicit discharge. The Conservation Commission will notify a violator of the proposed termination of its municipal storm drain system access. The violator may petition the Conservation Commission for a reconsideration and hearing.

SECTION 4: WAIVERS

- **A.** The Conservation Commission may waive strict compliance with any requirement of the City of Attleboro STORMWATER MANAGEMENT RULES AND REGULATIONS promulgated hereunder, where:
 - 1. such action is allowed by Federal, State, and local statutes and/or stormwater rules and regulations;
 - 2. is in the public interest; and
 - 3. is not inconsistent with the purpose and intent of the City of Attleboro <u>STORMWATER MANAGEMENT</u> <u>ORDINANCE</u>.
- **B.** Any applicant may submit a written request to be granted such a waiver. Such a request shall be accompanied by an explanation or documentation supporting the waiver request and demonstrating that strict application of the stormwater rules and regulations does not further the purposes or objectives of these stormwater rules and regulations.

C. If in the Conservation Commission's opinion additional time or information is required for review of a waiver request, the Conservation Commission may request an extension of the review period. In the event that the applicant objects to an extension or fails to provide requested information, the waiver request may be denied "without prejudice" by the Conservation Commission.

SECTION 5: SURETY

Prior to the start of land disturbance or construction activity, the Conservation Commission may require the applicant to post a surety bond, irrevocable letter of credit, cash, or other acceptable security, when deemed appropriate. The form of the surety shall be approved by the City Treasurer, and be in an amount deemed sufficient by the Conservation Commission to ensure that the work will be completed in accordance with the SMP. If the project is phased, the Conservation Commission may release part of the surety as each phase is completed in compliance with the SMP, but the surety may not be fully released until the Conservation Commission has received the final inspection report as required by §6.1, CONSTRUCTION INSPECTIONS of these stormwater rules and regulations and has issued a Certificate of Completion.

SECTION 6: INSPECTIONS

§6.1, CONSTRUCTION INSPECTIONS:

- **A.** Notice of Construction Commencement The applicant must notify the Conservation Commission forty–eight (48) hours in advance before the commencement of construction. In addition, the applicant must notify the Conservation Commission in advance of construction of critical components of the stormwater management facility.
- **B.** At the discretion of the Conservation Commission, periodic inspections of the stormwater management system construction shall be conducted by the Conservation Commission or its designee. All inspections shall document the following information:
 - 1. The date and location of the inspection;
 - 2. Whether construction is in compliance with the approved Stormwater Management Plan;
 - 3. Variations from the approved construction specifications; and
 - 4. Any other variations or violations of the conditions of the approved Stormwater Management Plan.
- C. The Conservation Commission or its designee shall have the right to inspect the project site at the following stages, at a minimum:
 - 1. Initial Site Inspection: prior to approval of any plan;
 - 2. Erosion and Sediment Control Inspection: to ensure erosion and sediment control practices are in accord with the approved plan;
 - 3. Stormwater Management System Inspection: An inspection will be made of the completed stormwater management system, prior to backfilling of any underground drainage or stormwater conveyance structures; and
 - 4. Final Inspection:
 - a. After the stormwater management system has been constructed and before the surety has been released, applicants may be required to submit a Record Drawing(s) certified by a Massachusetts—licensed Professional Engineer and Massachusetts—licensed Professional Land Surveyor for any stormwater management facilities or practices constructed in compliance with a SMP issued for the project.

b. The Conservation Commission shall have the right to inspect the system to confirm the features in the Record Drawings. This inspector may also evaluate the effectiveness of the system in an actual storm. If the inspector finds the system to be adequate, he shall so report to the Conservation Commission which will issue a Certificate of Completion. Record Drawings shall be full—size plans which reflect the conditions of a project following construction, including all final grades, developed by a Massachusetts—licensed professional engineer and Massachusetts—licensed professional land surveyor. All changes to the approved project design should be recorded in red ink and initialed by a Massachusetts—licensed professional engineer and Massachusetts—licensed professional land surveyor on plans to define changes made. All work deleted, corrections in elevations, and changes in materials should also be shown on the Record Drawings in red ink.

D. System Requiring Corrective Actions:

- 1. If the system is found to be inadequate by virtue of physical evidence of operational failure, the applicant shall correct it before the Certificate of Completion is released. If the applicant fails to act, the Conservation Commission may use the surety bond to complete the work.
- 2. If the Conservation Commission determines that there is a failure to comply with the plan, the property owner shall be notified in writing of the nature of the violation and the required corrective actions. A "Stop Work Order" shall be issued until any violations are corrected and all work previously completed has received approval by the Conservation Commission.

§6.2, POST-CONSTRUCTION INSPECTION AND MAINTENANCE:

A. Maintenance Responsibility:

- 1. The Owner of stormwater management facilities and practices included in the Final Stormwater Management Plan is responsible for conducting ongoing inspections to document maintenance and repair needs and ensure compliance with the requirements of the operation and maintenance agreement, the plan, and these stormwater rules and regulations.
- 2. The owner of the property on which work has been done pursuant to these stormwater rules and regulations for private stormwater management facilities, or any other person or agent in control of such property, shall maintain in good condition and promptly repair and restore all grade surfaces, walls, drains, dams and structures, vegetation, erosion and sedimentation controls, and other protective devices. Such repairs or restoration and maintenance shall be in accordance with the approved plans.

B. Maintenance Inspections:

- 1. All stormwater management facilities must undergo inspections to document maintenance and repair needs and ensure compliance with the requirements of these stormwater rules and regulations and accomplishment of its purposes as specified in the O&M Plan and Maintenance Agreement described under §2(H), OPERATION AND MAINTENANCE PLAN CONTENTS of these stormwater rules and regulations.
- 2. At a minimum, inspections shall occur during the first year of operation and at least once every two (2) years thereafter or more frequently as deemed necessary. In addition, a Maintenance Agreement as specified under \$2(H), OPERATION AND MAINTENANCE PLAN CONTENTS of these stormwater rules and regulations shall be executed for privately—owned stormwater management systems that specifies the Responsible Party for conducting long term inspections.